

CALIFORNIA'S HEALTH

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GUY P. JONES
Editor

PROGRAM

Department of Health Officers, League of California Cities, Sacramento, October 19-21, 1943
CITY COUNCIL CHAMBERS, CITY HALL, 9th AND 11th STREETS

TUESDAY MORNING

- 8.00 a.m. Registration, Senator Hotel, 12th and L Streets
10.00 a.m. General Opening Session
Assembly Chamber, State Capitol

TUESDAY AFTERNOON

- 2.15 p.m. Report of the Secretary, Health Officers' Section
Wilton L. Halverson, M.D.
Director, State Department of
Public Health, San Francisco
- "Tropical Diseases and the War"
Alfred C. Reed, M.D.
Stanford University School of Medicine
San Francisco
- "The Health Officer's Part in the Allied Military
Government"
Prof. Edwin A. Cottrell
Department of Political Science
Stanford University
- "Proposals to Meet the Impact of Returning Malaria
Carriers"
Stanley B. Freeborn
Senior Surgeon (R)
United States Public Health Service
- "The Newer Aspects of Gonorrhea Control and Treat-
ment"
Percy S. Pelouze, M.D., Special Consultant
U. S. Public Health Service; Member Board of
Directors, American Neisserian Medical Society

WEDNESDAY MORNING

- Edward Lee Russell, M.D., Presiding
Health Officer, Orange County, Santa Ana
- 9.00 a.m. POLIOMYELITIS
"Its Epidemiology"
William McD. Hammon, M.D.
Assistant Professor of Epidemiology
University of California

Discussion:

W. C. Buss, M.D.
Kern County Health Department
Bakersfield

"Its Treatment"

Jasper W. McFarland, M.D.
White Memorial Hospital
Los Angeles

WEDNESDAY AFTERNOON

John A. Carswell, M.D., Presiding
Health Officer
Santa Barbara County Health Department

2.15 p.m. SANITATION

- "Rodent Control in Cities"
To be announced
- "Botulism and Home Canning"
Karl F. Meyer, M.D., Director
Hooper Foundation for Medical Research
San Francisco
- "Supervision of Food Handlers"
Mr. Levitte Mendel
San Jose Health Department
- "Sanitarians' Problems"
Mr. William L. Nunes, President
National Association of Sanitarians
Los Angeles City Health Department

WEDNESDAY EVENING

Annual Banquet, Health Officers' Section, Elks' Club,
\$2 per plate

THURSDAY MORNING

- 9.00 a.m. HEALTH OFFICERS ONLY
An informal discussion of local health problems

MENACE OF MALARIA INCREASES

In a recent address before the New York Academy of Medicine, Dr. Paul F. Russell, Lt. Colonel in the Medical Corps of the United States Army, and Chief of the Tropical Disease and Malaria Control Section in the Office of the Surgeon General of the United States Army, said that malaria presents, of all diseases today, probably the most effective barrier to prosperity, contentment and health. This is unquestionably true for a large part of the globe but it can not apply fully to any portion of the United States, although some sections are suffering greatly through the handicaps that malaria imposes upon their populations, particularly those in the rural districts. At all events, it is important to give malaria full consideration at the present time and to take every essential step lest the disease might become widely prevalent in this State.

Dr. Russell said that adequate world-wide morbidity and mortality statistics regarding malaria do not exist. Yet it is generally believed by those who have studied the subject that no disease has or has had through the centuries a more pronounced influence on world health than malaria. Historians suggest that the disease has postponed development of the tropics for centuries and that it has accelerated the decline of nations. Even today, this preventable mosquito-borne infection is the greatest enemy of merchant, soldier, administrator, and farmer, in all of the warmer countries.

Dr. Russell said, in part, "Such sweeping assertions seem rash in the United States where in 1941 the mortality rate for malaria in 14 southern states was only 2.73 per 100,000. Taking the census registration area of the whole country, the death rate from malaria in 1900 was 7.9 per 100,000 but only 1.1 in 1940. Relatively few can recall local conditions of six or seven decades ago when our South was highly malarious and even such northern states as Michigan, Illinois, Indiana, and Ohio were afflicted. For instance, the death rate from malaria in Michigan in 1880 was 19.5 per 100,000. As late as 1900, Memphis had a malaria mortality rate of 200 per 100,000, and Savannah almost as great. High as these urban malaria rates appear, they were about a fifth of those obtaining in such tropical cities as Singapore as late as 1911.

"What the actual sum total of malaria is today, no one knows, or can estimate closely. But one would venture to assume from such data as are available and from personal acquaintance with certain areas, that there are not less than 3,000,000 malaria deaths and at least 300,000,000 cases of malarial fevers each year, throughout the world.

"These facts are of greater concern to us now than ever before. In this global war our armed forces are

operating in some of the world's most malarious areas. We have already felt the impact of this debilitating fever in such places as Panama, West Africa, Burma, New Guinea, and the Solomon Islands. In such areas malaria is by all odds the greatest disease hazard to our soldiers; indeed, in some places it is a greater menace than the enemy. To more than one of our medical officers malaria is no longer an exotic disease but a difficult military problem.

"In this second quarter of the twentieth century malariology has shared in the general advance of science. It is not possible here to do more than to cite three notable lines of progress.

The Synthetic Antimalarials

"Paul Ehrlich found, in 1891, that methylene blue will stain malaria parasites and he hoped that it would therefore act therapeutically by damaging the parasites in human blood. When its chemotherapeutic action was found to be slight, investigators modified its chemical structure, hoping to enhance the plasmocidal effect. This line of study finally led by devious paths to the synthesis of plasmochin, in 1924, by Schulemann and his colleagues in Germany, and of atabrine in 1930 by Kikuth, Mietzsch and Mauss in the same place. Neither of these drugs is synthetic quinine. Plasmochin is a quinoline derivative. Atabrine is a yellow dye derived from acridine. Plasmochin was found to be unique in its effectiveness against gametocytes, especially those of *P. falciparum*, and in its relative ineffectiveness against the schizonts of this same species. Atabrine was found to resemble quinine in its action against all species of schizonts and in its weakness in affecting any of the gametocytes. Quinine, plasmochin, and atabrine are alike in their inability in a percentage of cases to cure without the occurrence of relapses, and in their failure, in safe doses, to prevent infection by sporozoites. None of the three has been found to be a true causal prophylactic, although each in small doses tends to suppress clinical symptoms. All three may exhibit toxic effects, quinine least and plasmochin most often.

"Atabrine is by no means a perfect substitute for quinine but it is, nevertheless, a fairly effective anti-malarial, now (fortunately) being manufactured on a large scale in the United States, England, and Russia. The Germans also are using extensively tablets of their own manufacture.

"There is still no drug which is sufficiently effective to justify the use of chemoprophylaxis to eradicate malaria from communities. However, in spite of the fact that neither plasmochin nor atabrine has proved to be that potent chemical wand so earnestly desired, yet these drugs do represent a notable forward step in malaria therapy.

Pyrethrum Spray Killing

"There is a chrysanthemum indigenous to Dalmatia, growing in the fields like a small yellow daisy. The full blown flower of this plant contains active principles, called pyrethrins, which are deadly to insects. This latter fact has been known for many years in agriculture and public health and the dried pyrethrum flowers have become an important item of trade, so that large pyrethrum plantations have been developed in Japan, Kenya, and lately, in India.

"Pyrethrins are contact poisons to which the cuticle of a mosquito is permeable. The toxic effect is seen chiefly in a destructive action on the central nervous system. Kerosene extracts of pyrethrum have long been in household use against mosquitoes but only recently has it become apparent that pyrethrum spray-killing in many rural tropical areas is the best weapon available for malaria control, in fact it is the only one which is financially feasible in much of the rural tropics. Standard use of larvicides or of drainage and filling, or of screening has been far beyond the pocketbooks of these areas.

"If the adult malaria-carrying mosquitoes of a community can be destroyed before they have lived long enough to become infective then malaria transmission in that community ceases. In villages where the malaria vector mosquito species tends to remain inside huts, cowsheds or outbuildings accessible to spray-killing, it is possible by spraying thoroughly once a week with pyrethrum to break the chain of infection and thus to control malaria, at a cost which is considerably less than the cost of malaria and is not beyond the economic potentialities of the tropics.

"This is notable progress which may be further enhanced by newer methods of dispensing the spray. In 1935 it seemed true to state about the tropics that, 'so far as average rural areas are concerned, the problem of control is still unsolved * * * it appears that we have no economically feasible control measures.' In 1942, experiments in rural South India proved that the malaria chain can be broken, in typical small villages, at per capita costs around \$0.08 per year, which are economically feasible even in India.

Species Eradication

"In 1930, Shannon, an entomologist on the staff of The Rockefeller Foundation, reported that he had found *Anopheles gambiae* in Brazil. This was of great interest because *gambiae* is a notorious African species. Apparently a fast French destroyer had taken this deadly mosquito from Dakar to Natal, and the stow-away had succeeded in colonizing in the New World.

"By 1931 the species had spread 115 miles up the coast stimulating local antimalaria campaigns along

conventional lines. These had some success and lulled the Health Department into a sense of complacency which was completely shattered in 1938 when *gambiae* caused what was probably the greatest epidemic of malaria ever seen in the Americas. During the first six months there were over 100,000 cases with at least 14,000 deaths. It became apparent that the African invaders had colonized for more than 200 miles north and west of Natal. This African species threatened to invade all of northern Brazil from which it might push on into Central America, with devastating results.

"Displaying great courage, the Brazilian Government decided to attempt not merely the usual anti-malaria measures but an actual eradication of every *gambiae* mosquito in the country. This complete extirpation of a species of mosquito had never been accomplished in any land at any time. A poll of experienced malariologists would doubtless have judged it an impossibility, for *gambiae* has the habit of breeding in all types of water collections, large and small.

"By presidential decree, in 1939, the Malaria Service of Northeast Brazil was created. It was organized as an anti-*gambiae* rather than anti-malaria service. Under the guidance of Soper and Wilson, of the staff of The Rockefeller Foundation, this Brazilian organization, much of which had had years of training in anti-*Aedes* work, grew to be 4,000 strong, and was allotted total budgets of more than \$2,000,000. The whole infested area, and a little beyond, was divided into squares of workable size; an adequate control gang was assigned to each square; and there was simultaneous and meticulous application of Paris green to breeding places and of pyrethrum spray-killing to adult resting places. The result of this determined, systematic and overwhelming attack was what now seems almost certainly to have been the complete eradication of *gambiae* from northeast Brazil and thus from the New World. The last evidence of *gambiae* in this area was found on November 14, 1940. Since January, 1941, all anti-*gambiae* measures have been suspended; a large staff of trained men have been constantly combing the area and contiguous zones for *gambiae*, and there has been a standing cash reward for finding it. Not a single living *gambiae* larva or adult could be found in 1941 or 1942. (But some dead adults were found in an airplane from Africa in 1942, illustrating clearly the need for complete enforcement of the pyrethrum spray-killing regulation for all airplanes arriving in Brazil from Africa.)

"This is a very great achievement, a sanitary triumph, which marks the start of a new era in the fight against malaria. Great though the cost of the Brazilian campaign, it was very much less than the toll which

gambiae would have exacted in the long run had it been only curbed by usual antimalaria measures rather than extirpated by a new and bold technique. This success suggests similar possibilities in other parts of the world. It is no longer certain that the malaria-carrying mosquitoes of a country could never be exterminated.

"With large numbers of men well-trained in mosquito and malaria control work returning from overseas after the war, with the need for progressive post-war public health planning, with a genius for organization, and with money, it is certainly within reason to believe that malaria, if not the last mosquito vector, could be eradicated from the United States.

THE FUTURE

"There are certain trends in malaria research which may be taken as some indication of what the future may bring.

Antimalarials

"For instance, there is a tremendous amount of chemical, pharmacological, and clinical research going forward at the present time in a determined and intensive search for an antimalarial chemotherapeutic agent which will not have the deficiencies of quinine, plasmochin, and atabrine. The need is apparent when it is recalled that not one of this trio will cure with certainty, not one is a true prophylactic drug, and not one is of much value in the control of community malaria. Clark and his colleagues as an experiment, tried for ten years to control malaria in some Panamanian communities by means of these drugs. They concluded that it was impossible by mass treatments to reduce the parasites to a point where malaria transmission in a community was much lessened.

"It seems reasonable to hope that a more effective antimalarial will be developed in the not too distant future.

Immunity

"As the science of immunology develops it is probable that the immunity factor in malaria will assume more importance. Whether vaccines and serums will ever have a practical place in combating malaria is a matter for speculation, with some evidence that some day a way may be found to make them useful.

Removal of Social Obstacles

"Probably the greatest advance in the future will be the removing of some of the social obstacles which block rapid progress in malaria control. Surely, it is amazing that, with all of our laboratory and field knowledge of malaria and its anopheline carriers, with all of our potent weapons of oil and Paris green, screens and pyrethrum, drainage and water-manipulation, with

brilliant examples of successful projects, with our repeated demonstrations that it is cheaper to control malaria than to pay the economic toll it exacts from its victims—with all this, malaria control in the middle period of the twentieth century is still such a feeble effort. Is this due to insufficient knowledge, inefficient tools, paucity of funds? Or is our social organization unable to apply effectively the money, potential labor, existing weapons of control, and wealth of experience and research findings?

"The answer to the question, 'Why malaria?' seems to involve certain social obstacles to malaria control. Over widespread areas, particularly in the tropics, these appear to consist of such social facts as (1) a fundamental absence of educated and effective public opinion as regards the economic importance of malaria, the methods available for its control, and the community's responsibilities for its prevention; (2) a surprisingly limited use of sound administrative principles in public health, so that coordination and cooperation between departments does not exist, and continuity of effort in dealing with malaria is rare; (3) a lack of sufficient numbers of personnel specially trained in the entomological, agricultural, engineering, and public health phases of malariology; (4) a lack of cognizance by public officials as to the cost of malaria and the public benefit to be derived from its control; (5) a widespread ineptness in applying effectively and practically the results of research in malariology.

"What Bernal wrote about science in general may be said of malaria control: 'The obstacles to the solution of the problem are not any longer mainly physical or biological obstacles; they are social obstacles.' It seems incredible that malaria still can be so great a scourge, for it is a preventable disease regarding which we possess as complete knowledge as for any human malady. The literature on malaria stretches back 2,000 years, grows actively, and has become enormous. There have been devised potent weapons for treatment and control. But malaria persists, of all diseases today probably the most effective barrier to prosperity, contentment, and health. What a paradox! Man, with his incredible machines and his streamlined science, stricken each year in millions because he fails to outwit a mosquito carrying Death in its spittle!"

We of the United Nations have a great aim before us—the advancement of mankind—toward which voluntary service should be our deepest pride and vicarious pain our highest decoration.

You and I realize that the days for financial and territorial conquistadores are over, and that in their place international understanding and good-will must be exercised as the lodestar for the future of mankind.—Mme. Chiang Kai-Shek.

STATE LAUNCHES HEARING CONSERVATION PROGRAM

At its last session, the Legislature enacted a law which provides that the State Department of Public Health must seek out children who may have hearing handicaps and that they shall employ skilled services in the detection of such cases. This activity has been placed under the Bureau of Maternal and Child Health in order that it may be correlated to the conferences conducted by the Bureau where complete physical examinations are given to children of both preschool and school ages.

Hearing impairments in children are relatively common. Many of them occur following attacks of upper respiratory infections and many of them may be due to malnutrition, glandular disturbances, and a host of other factors, many of which are under investigation.

In order to start the program, as required by the new law, upon a sound and scientific basis, the services of Warren H. Gardner, Ph.D., for the past three years Consultant in Hearing and Vision for the Oregon State Board of Health, have been secured. Dr. Gardner has conducted similar activities in Indiana and Iowa. He has personally given audiometric tests to more than two hundred thousand children. He is President of the American Society for the Hard of Hearing and is affiliated with many scientific and educators' organizations. He has recently been made a lay member of the Committee on Conservation of Hearing for the American Academy of Ophthalmology and Otolaryngology.

Dr. Gardner's headquarters will be in San Francisco and the program that he is about to inaugurate will cover the whole State. His title is Specialist in Hearing Conservation. Many of the features will be new and many of them will constitute coordination of existing activities. It is believed that, through the services of Dr. Gardner, as made possible through the new legislation, California may develop one of the most outstanding programs in the conservation of hearing and prevention of deafness of any of the States.

PARENTS' PERMISSION NECESSARY FOR X-RAYS

The California State Department of Public Health recently asked the Attorney General, Honorable Robert W. Kenny, if it is necessary for voluntary tuberculosis associations to obtain parental consent to take X-ray pictures of minors engaged in war work who live in Los Angeles and vicinity. In his reply the Attorney General said:

"While there is no statute requiring that the consent of the parents of a minor be obtained prior to taking X-ray pictures of a minor, personal liability may rest

upon those persons who do so without obtaining such consent and upon those who direct their action.

"In *Figlietti v. Frick*, 203 Cal. 246, it is held:

"If the operation was performed while that relation (physician and patient) existed, it is equally a breach of duty, if performed without the consent on the part of the patient, or in the case of a minor, if though capable of giving consent, or if, with consent, it was done unskillfully."

"The courts have uniformly held that without the consent of a parent or one standing in loco parentis, a surgeon is without authority to operate on a child. The taking of X-rays or administering to a person without his consent or to a minor without the consent of the parent is a trespass upon the person upon whom the services are performed."

CADET NURSES ARE NEEDED

The Need

Medical care of civilians is approaching a dangerous level. By the end of the year, it is expected that one-fifth of the Nation's effective nursepower and one-third of its effective medical manpower will be on active duty with the armed forces. The United States Public Health Service estimates that civilian hospitals will find their nursing staffs depleted by 20 to 40 per cent. Several thousand additional public health nurses are needed. California is last among the States in the percentage of high school graduates who enter schools of nursing.

The Answer

The United States Cadet Nurse Corps hopes to increase enrollments this year in the various nurses' schools by 65,000. The corps is headed by Miss Lucille Petry, Chief, Nurse Education Division, United States Public Health Service. It was created under the Bolton Act, and \$45,000,000 was appropriated for use this year. This money will be disbursed through nursing schools to finance student nurses.

Who Is Eligible to Join the Corps?

Any high school graduate between the ages of 17 and 35 who is accepted for training by an accredited school of nursing which is participating in the program. Any undergraduate nurse, now in training, who entered school after January 1, 1941.

What the Cadet Nurse Receives

1. Opportunity to serve in the war effort while she learns.
2. Public recognition of her service through the privilege of wearing a uniform.

3. Training at Government expense in a lifetime profession. Outdoor uniforms, school uniforms, tuition and all other fees, including the cost of books are paid and the following stipends are provided:

- a. Precadet Nurse. First 9 months—\$15 a month.
- b. Junior Cadet. Next 15 to 20 months—\$20 a month.
- c. Senior Cadet. Remaining months of training—\$30 a month. During this period, the stipend is paid by the school or the institution using the services of the cadet.

What the Cadet Nurse Agrees to Do

Health permitting, to remain in active nursing for the duration, either in a civilian or military capacity, *as she chooses*. The Bolton Act provides that Federal aid be made available to allow any member of the corps enrolled 90 days prior to the end of the war to complete her basic nursing course.

Where Should Applications Be Made?

Information concerning nursing schools which are participating in the program and requirements for admission can be obtained from the nearest hospital or from the California State Nurses Association, 26 O'Farrell Street, San Francisco, or from Student Nurse, Box 88, New York, N. Y.

Regulations Governing Eligibility of Schools

Any accredited school of nursing is eligible to participate in the Federal nurse education program. An acceptable plan must be submitted to the United States Public Health Service. The school must provide its essential instruction and experience in from 24 to 30 months and at the end of that period either graduate the students or leave them free for assignment where needed during the remaining time required for graduation. Since California requires 36 months of training for registration, the student would remain a senior cadet from the time she completes the course until she is formally graduated. During that period, she would be available for assignment. Military hospitals may request the services of senior cadet nurses, but it is not expected that more than 20 per cent of the senior cadet nurses will be needed for this service.

For Further Information

See *The American Journal of Nursing*, August, 1943.

The courage of our men on the fighting fronts is no greater than that of the mothers who can "only stand and wait."—Gen. George C. Marshall.

MUSSEL POISONING REPORTED

The first cases of mussel poisoning that have occurred since 1939 have appeared in Humboldt and Del Norte counties. Altogether, 22 individuals were taken ill, four of whom died. An annual quarantine is established on mussels along the California coast from May 1st to September 30th of each year. The establishment of the quarantine is well known and the individuals who were taken ill in this outbreak disregarded the quarantine which was well known to all of them. In fact, a 12-year-old boy in one of the groups that suffered from the poisoning, harangued them on the dangers involved and refused to eat them himself. Of the nine persons in this group who were taken ill, two of them died. It is unfortunate that, in spite of warnings, many individuals do not regard the eating of mussels during the summer months as a great hazard to health. This outbreak should serve as a distinct warning to residents along the California coast that it is not safe to eat mussels during the summer months that are designated in the annual quarantine.

HUMAN PLAGUE REPORTED

The first human case of bubonic plague to be reported in 1943 has occurred in an 11-year-old Indian boy in Siskiyou County. He recently went on a hunting trip, during which he killed and skinned ground squirrels. One week after his return a right axillary bubo developed and a diagnosis of bubonic plague was established. He is being treated with sulfadiazine and is now well on the way to recovery. This was the first human case of bubonic plague to have been reported in California since 1942.

During August there was a marked increase in positive laboratory examinations for plague in lots of fleas, lice, ticks, and pools of rodent organs sent from Mono, Monterey, Kern, Siskiyou, and Inyo counties. While there is nothing in the present plague situation to cause added alarm, it is of the greatest importance that activities in detecting the presence of plague infected rodents, fleas, ticks, and lice, be continued without abatement. This procedure constitutes the State's best insurance against the extension of this dreaded disease in California.

Schools need not preach political doctrine to defend democracy. If they shape men capable of critical thought and trained in social attitudes, that is all that is necessary.—Albert Einstein.

The experiences of a long life and the promptings of my blood awake in me the conviction that there is nothing more important for the future of the world than the fraternal association of our two peoples in righteous work both in war and peace.—Winston Churchill.

PHYSICIANS NEEDED BY COUNTY

The Los Angeles County Civil Service Commission announces examinations for the positions of physicians, head anesthetist and chief physician (tuberculosis) in the Los Angeles County Department of Charities which includes the Los Angeles County General Hospital, Rancho Los Amigos and the Olive View Sanatorium.

Physicians interested in any of these positions should write to the office of the commission, Room 102, Hall of Records, Los Angeles (12), for full information. Applications must be filed on or before October 22, 1943, for the physician and anesthetist positions, and by September 30th for the chief physician position.

THE CONQUEST OF EPIDEMIC DISEASE*

A Chapter in the History of Ideas

By CHARLES-EDWARD A. WINSLOW

Winslow develops his theme, the conquest of epidemic disease, "as the consecutive story of an intellectual progress" from demonology to the crystalization of a filterable virus.

The author is Lauder Professor of Public Health at Yale University and holder of many special awards, including the Sedgwick medal. As a stimulating leader in Yale's School of Public Health, his progressive ideas have inspired a splendid succession of youths who are now becoming leaders throughout the Nation. The clarity of his thought and expression, and something of his inspiration as a teacher, can be found in the present presentation.

This "Chapter in the History of Ideas" reveals a deep and accurate knowledge of the history of the Science of Medicine and of Epidemiology. We are shown how much knowledge each age has added to that of the preceding ones and when our own age is reached an analysis of present day thought and method is presented so that the story does not seem ended but rather is the beginning of a fight for the solution of public health problems which still challenge the mind of man.

The ideal of scientific expression must be a single precise and clear meaning for every sentence. It is this type of precision writing which makes Professor Winslow's book refreshing and which gives the reader a sense of possession of solid facts.

It was an enormous task to which Professor Winslow had set himself in following this single stream of human thought through the ages of our civilization. It must have been particularly laborious as the stream slowed during the Dark Ages. Only one sigh is heard: Reviewing the writings of Max von Pettenkofer, the great

Munich Master of Hygiene who held, in a last stand, to the theories of a miasmatic spread of disease Winslow says: "It is probable that for a quarter of a century no one but the writer has actually waded through the many hundreds of pages of Pettenkoferian writings; and the completion of the task is one that is accompanied with some relief. The monographs which have been reviewed are prolix and repetitious." Yet conciseness is brought out of prolixity and the tangle of Pettenkofer thought is unraveled and presented in a few terse paragraphs.

Students of Science and history alike will find refreshing pleasure in Winslow's thumb-nail sketches of the great characters whose brilliant achievements brighten his pages: "Richard Mead, fine flower of urbane eighteenth-century medicine." Theobald Smith: "the typical scientist, slender and bearded in person, cold and precise in manner, accurate and meticulous in his work to the last degree, completely absorbed in his researches—he forgot to appear for an honorary degree to have been awarded by one of America's most distinguished universities. He was a pioneer in the study of immunology and anaphylaxis, in the study of tuberculosis, in sanitary water analysis and in a dozen other fields of bacteriology. When the writer was beginning his career it was a somewhat rueful jest in the laboratory that if you had a new idea you always found that Theobald Smith had it first."

Striking paragraphs give historic setting: "It was a tremendously vivid and vital world which the new plague was attacking. This was the day of Ferdinand and Isabella and of Cesare Borgia. In 1498 Savonarola preached his last sermon in Florence and Machiavelli was sent by his signory on his mission to Caterina Sforza—that hard-bitten countess who, when rebels besieging her castle held her children captive and threatened to slaughter them, defied the besiegers to do their worst with that gorgeous phrase, "I can make more children," so typical of the essential spirit of the Italian Renaissance. The paintings of Raphael and the sculptures of Michelangelo were delighting the eye of the artist and the first half-century's output of the printing press was intoxicating the mind of the scholar. Leonardo was experimenting with his flying machine and prophesying that: "The human bird shall take his first flight, filling all the world with amazement."

Occasional sentences are epigrammatic in their shortness and weight of meaning: "The Hebrews gave us the universe of moral law; but the Greeks clearly visualized for the first time in human history a universe of natural law."

This book is in itself a demonstration of the essential beauty of human progress through an analysis of one phase of brilliant thought: "We shall never return to

* A review of Dr. Winslow's book, by Elmer Belt, M.D., President, California State Board of Public Health.

the demonic and miasmatic theories of the past. The practical application of the principles developed by a series of clear thinkers and brilliant investigators from—Fracastorius to Chapin—has forever banished from the earth the major plagues and pestilences of the past." "Three-quarters of a million lives a year are being saved in the United States by the application of the principles of modern public health."

THOMAS CARLYLE ON HEALTH

Thomas Carlyle is not often quoted in this age—he belonged to another day. He is said to have suffered from dyspepsia, and in most of his writings he is extremely caustic. He placed a high valuation upon health, however, as is shown in the following quotation from his inaugural address as rector of the University of Edinburgh:

"Finally, gentlemen, I have one advice to give you, which is practically of very great importance, though a very humble one. In the mist of our zeal and ardour—for such, I foresee, will rise high enough, in spite of all the counsels to moderate it that I can give you—remember the care of your health. I have no doubt you have among you young souls ardently bent to consider life cheap, for the purpose of getting forward in what they are aiming at as high; but you are to consider throughout, much more than is done at present, and what it would have been a very great thing for me if I had been able to consider, that health is a thing to be attended to continually; and that you are to regard that as the very highest of all temporal things for you. There is no kind of achievement you could make in the world that is equal to perfect health. What to it are nuggets and millions? The French financier said, 'Why is there no sleep to be sold?' Sleep is not in the market at any quotation.

"It is a curious thing, which I have remarked long ago and have often turned in my head, that the old word for 'holy' in the Teutonic language, heilig, also means 'healthy.' Thus Heilbronn means indifferently 'holy-well' or 'health-well.' We have in the Scotch, too, 'hale,' and its derivatives; and, I suppose, our English word 'whole' (with a 'w'), all of one piece, without any hole in it, is the same word. I find that you could not get any better definition of

what 'holy' really is than 'healthy.' Completely healthy means sana in corpore sano. A man all lucid, and in equilibrium. His intellect a clear mirror geometrically plane, brilliantly sensitive to all objects and impressions made on it, and imagining all things in their correct proportions; not twisted up into convex or concave, and distorting everything, so that he can not see the truth of the matter without endless groping and manipulation; healthy, clear and free, and discerning truly all around him. We never can attain that at all. In fact, the operations we have got into are destructive of it. You can not, if you are going to do any decisive intellectual operation that will last a long while; if, for instance, you are going to write a book—you can not manage it (at least I never could) without getting decidedly made ill by it; and really one nevertheless must; if it is your business, you are obliged to follow out what you are at, and to do it, even at the expense of health. Only remember, at all times, to get back as fast as possible out of it into health; and regard that as the real equilibrium and center of things. You should always look at the heilig, which means 'holy' as well as 'healthy.'"

SYPHILIS ON THE AIR

A new series of broadcasts on syphilis started over radio station KFI, Los Angeles, on September 11th at 10.15 p.m. and will follow every Saturday at the same hour for 13 weeks. The broadcast is a joint enterprise between radio station KFI, the California State Department of Health, and the Los Angeles City and County Health Departments. The story of syphilis is told dramatically and the station is furnishing the best available radio actors. This series is an outgrowth of another series in which a health program provided panel discussions of general community health problems. This panel included health officers, industrialists, and businessmen who were interested in public health. The new venereal disease series, particularly the dramatic plays, are received with enthusiasm.

This radio station gained national recognition some time ago because it dared to mention the word "syphilis" on its microphones. Fortunately, the name of this disease is no longer withheld and it is discussed as freely and openly as any other of the infectious and communicable diseases.

This cooperative spirit must continue to prevail if the war is not to be fought in vain. The days of ruthless competition between nations as between individuals must end with war. God grant that we have learned our lesson and are ready to work together for the sake of world peace and world justice.—Rabbi Israel Goldstein.



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